DOCUMENT RESUME

ED 423 101 RC 021 654

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TITLE A Native Perspective on the School Reform Movement: A Hot

Topics Paper.

INSTITUTION Northwest Regional Educational Lab., Portland, OR.

Comprehensive Center, Region X.

SPONS AGENCY Department of Education, Washington, DC.

PUB DATE 1998-08-00

NOTE 13p.

CONTRACT S283A50041

AVAILABLE FROM Northwest Regional Educational Laboratory, 101 S.W. Main

Street, Suite 500, Portland, OR 97204.

PUB TYPE Opinion Papers (120) EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS American Indian Culture; *American Indian Education;

Cooperative Learning; Cultural Exchange; Educational Needs; Educational Strategies; Elementary Secondary Education; *Experiential Learning; *Holistic Approach; Integrated

Curriculum; *Student Evaluation

ABSTRACT

In the most recent wave of school reform, educators are beginning to move past learning about American Indian culture, to learning from Indian cultural ways and using them to improve their instructional practice. Recent developments in federal educational policy, such as the Improving America's School Act and Goals 2000 have opened the door to exciting changes in education. This legislation breaks down the bureaucratic barriers between programs and attempts to encourage creativity and control at the local level. This paper suggests that Title IX Indian Education programs, Title IX parent committees, tribes, and the general Indian community must seize this moment to advocate for the reforms that work best with Indian students. This document examines areas in which European Americans can learn about the learning process from Indian people. American Indian students have been poorly served by the factory model of education, with its rote learning, competitive atmosphere, and standardized testing. For thousands of years, Indian people viewed their experience in the world as the living curriculum and master teacher, with emphases on relatedness, communal collaboration, and learning by doing. Several school reform practices are discussed whose essence should be recognizable to Indian people. These include integrated curriculum, applied learning, cooperative learning strategies, alternative assessments such as performance-based assessment, and discovery and use of the interrelationships in the natural world. (SV)

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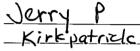
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School Reform Movement

A Hot Topics Paper

Northwest Regional Educational Laboratory's Comprehensive Center, Region X





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A NATIVE PERSPECTIVE ON THE SCHOOL REFORM MOVEMENT

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August 1998

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A NATIVE PERSPECTIVE ON THE SCHOOL REFORM MOVEMENT

Popcorn kernels fell from my lap as I rose to leave the movie theater after watching Dances with Wolves. Moving up the crowded exit aisle, I overheard two women talking in front of me. "That was so sad," said one, drying her eyes. "We lost so much when they destroyed Native American culture," the other replied.

I thought to myself, yes, she's right — much was lost. But I wonder if she knows how much American Indian culture survived and influenced the development of our nation. I wonder if she realizes how much Indian people continue to influence our present and will undoubtedly have a profound effect on our collective future.

As we enter the 21st century, more and more Americans are turning to Indian culture for answers to issues regarding the environment, spiritual needs, health and wellness, counseling, and education. It is this last area — education — that concerns me most as a father of two young children and a teacher and administrator in Indian education for the past 20 years.

It was six years ago that I sat in that movie theater watching *Dances with Wolves*; since then, as the latest tide of school reform has risen on the educational shoreline, educators are beginning to move past learning *about* Indian culture, to learning *from* Indian cultural ways and using them to improve their instructional practice. Recent developments in federal educational policy, such as the Improving America's Schools Act (IASA) and the Goals 2000: Educate America Act, have opened the door to these exciting changes in education. This legislation breaks down the bureaucratic barriers between programs and attempts to use regulations to encourage creativity and control at the local level. The IASA has created an opportunity that we can't afford to miss!

Title IX Indian Education programs, Title IX parent committees, American Indian tribes, and the general Indian community must seize this moment. We must all advocate for the reforms that work best with Indian students: An attitude of respect for student interests and ideas; teaching methods that engage our children, such as applied learning and integrated curriculum; assessment methods that will allow our students to demonstrate excellence in a variety of ways; and a classroom culture that emphasizes cooperation and builds on our students' interests and strengths.



Education in the Learning Factory

Black-and-white television had just been introduced to America when I sat in a first-grade classroom with a similar ambiance and color. Like cans perched neatly on a supermarket shelf, my classmates and I sat in alphabetical order at our desks. Being named Reyes, I sat year after year with the same group of Qs, Rs, and Ss at the back of the room, facing the backs of the As, Bs, and Cs who always sat at the front. Silence was golden. The only acceptable sound was a measured response to the teacher's queries. All other talking, laughing, and moving were forbidden.

The closing years of this century pose serious challenges to conventional understandings of teaching, learning, and assessment. Until recently, the American public school education system, particularly at the secondary level, operated predominantly on a "factory model," like the schools I attended in the 1950s. At its worst, this meant that subject areas were rigidly separated, that students passively received knowledge from the lectures and textbooks, and that even within a discipline, material was often taught chapter by chapter, with no relationships drawn from one historical event or scientific principle to the next. Instructional methods were heavily weighted toward lectures, rote memorization, and basic skills drills.

In the factory model of education, the working atmosphere is competitive rather than cooperative. Assessment leans heavily on end-of-chapter, multiple-choice, and true/false tests and standardized assessments. Correct answers are valued over creativity, risk taking, and deeper understanding of concepts.

Native Americans have not fared well under the factory system. Despite 25 years of Indian education, nationwide achievement levels continue to be low and dropout rates continue to be high. I can understand why these students drop out. My high school experience was an ocean of boredom in which I floundered with Fs and Ds. I do, however, remember one island of passionate interest—a caring and inspired high school teacher who appealed to my natural curiosity and approached me as a person, rather than as a chronic truant. If more teachers used highly engaging teaching strategies coupled with respect for students and their ideas, as this one did, fewer Indian children would sink below the educational waters. But in many schools, even teachers who wish to approach their subject matter more creatively are limited by the 45-minute class periods and the separation of disciplines.

The factory model has always been at odds with traditional Indian ways of teaching and learning, which typically involved the family or community and were holistic, social, and used hands-on experiences. Children were taught



anywhere and everywhere, instead of Monday through Friday within the four walls of a classroom.

Today, educational reform is catching up with Indian tradition as more enlightened practices take hold in schools. For instance, my son's elementary school teachers use a version of a tribal practice known as a "talking circle" in which students pass around a "talking stick" or other object, usually created by the group, and take turns speaking in response to a theme posed in the form of a question. This practice begins the day and teaches active listening skills, patience, and discipline.

For thousands of years Indian people viewed their experience in the world as the living curriculum and master teacher, with its emphasis on relatedness, communal collaboration, and learning by doing. The school reform practices I will touch on in this discussion may bear unfamiliar names—integrated curricula, applied learning, cooperative learning, and alternative assessments—but their essence should be recognizable to Indian people.

Education Under School Reform

Crossing Boundaries

Some time ago I took my seven-year-old son, Christopher, and four-year-old daughter, Grace, out for a hamburger. Grace loves horses; earlier that day we had been drawing horses and I had written "COLT" under one of our creations. Now, as we began grazing on onion rings, Grace picked one up and said "O." Christopher, the young and emerging mathematician, said "No, that's a zero." A short time later, Grace took a bite out of her O and pronounced it a C. Later that evening she pointed to the C and O in the word "colt." How wonderful, I thought, that life provides us with multiple opportunities to see reading and math in the same experience, as Grace and Christopher did.

In real life, subject matter is not divided into disciplines. The Indian phrase "We are all related" describes the tribal understanding of life's interdependence and fluidity. Within the Indian concept of relativity, the world is a living curriculum, a seamless fabric within which several distinct areas of "content" can be seen and experienced in one "context."

In the classroom, curriculum can be integrated in many ways—through team teaching, through overarching themes or concepts that tie the disciplines together, and through bringing in people from the community to enhance the curriculum. An integrated unit of study in a nearby forest area might include



mapping the trails and landmarks (geography); researching how the park was established and how it has changed since then (history); documenting erosion and other damage caused by off-road vehicles for a report to the city council (research and writing); bringing in a storyteller from the Indian community to tell tales featuring the animals, birds, and plants of the area (literature and culture); observing the effects of exotic plants on native species (environmental science); or any number of other activities limited only by the interest and imagination of the students and their teacher.

Learning by Doing

One day when my son Christopher was four years old, we went for a walk in the woods near our house and I told him a Plant People story to introduce him to the botanical yarrow. Just as I had finished the story, we came across a family of yarrow in a meadow. I told Christopher to smell it, feel it, and stare at it, and then to smell it again with his eyes closed. I told him that yarrow was a relative whose friendship could help us in many ways. One way it could immediately help was to protect us from the hungry mosquitoes that buzzed around our heads. I told him to pick a yarrow flower and rub it on his arms, to field-test for himself the idea that yarrow is a natural insect repellent. Over the course of the summer I introduced him to many plants. For fun, I would have him close his eyes while I held his hand and guided him to a plant to smell. He always knew who yarrow was after that day.

Who remembers principles of geometry better, the child who only memorizes proofs, or the child who also uses geometry to design and build a structure? Which child truly learns to identify plants, the one who only reads about them, or the one who works in a restoration project to weed out introduced varieties and substitute native ones? Who learns a computer program better, the person who takes a class, or the one who must also complete a project using the program on the job? Calculating how much to reduce a photo to fit in the school paper etches the formula for determining percents indelibly in a child's mind. Raising salmon in a tank for release into a neighboring stream teaches more permanently than any textbook ever could the conditions necessary for eggs to hatch, the survival rates, and the overall life cycle of the salmon.

Learning in a classroom is inherently artificial. Newer methods of learning seek to open up the classroom to the worlds outside—worlds of nature, commerce, culture, and the community—and to take advantage of the fact that knowledge which is useful and used is retained. In the past, the term "applied learning" was often associated with manual arts to the exclusion of higher learning skills. Today, we know that when used to teach higher level skills, applied methods result in deeper and more permanent understanding. An applied learning



experience can also spark a child's interest in delving into more academic, less readily accessible sources of information, and make those materials come alive.

Applied learning often overlaps with integrated curriculum; for instance, an assignment to compose and design informational signs for a nature trail applies writing, art, design, and research skills to content in the natural sciences.

A Culture of Cooperation

My first few years in school were frightening and confusing. Though I was a quiet and obedient student, I had great difficulty learning to read because my mother, who was born in Mexico and has a fifth-grade education, spoke to me in Spanish. I dreaded reading out loud because I didn't want to make a mistake speaking English. Of course, other students were not allowed to help me or anyone else. Any collaboration was considered disruptive, or even cheating. Luckily, while the school culture made me feel alone, isolated, and afraid, my home culture made me feel connected, supported, and safe. In addition to my immediate family, I had 12 cousins to play with, fight with, and learn from. One of them, an older girl, helped me learn to read and pronounce English with confidence. With her, I felt no shame or fear of making mistakes.

While most tribal and other non-White cultures place great importance on the collective and the cooperation within it, Western culture celebrates the individual. In the education factory, learning is a solo act. Helping another student may be frowned upon and met with a reprimand for talking or cheating. But as cooperation and collaboration are becoming more important in the 20th-century workplace, new instructional techniques are bringing these values to the classroom and helping students learn to learn together.

Cooperative learning strategies include cross-age tutoring, peer tutoring, reading buddies, and team projects in which students take different roles or perform different functions in order to complete the work more efficiently. One particular method involves having changing learning groups of three to six students with diverse backgrounds and social and academic abilities work together to develop collaborative problem-solving and decisionmaking skills, thereby creating a strong learning community in the classroom.

Reassessing Assessment

Throughout my school career I had a fear of math. Then, when I least expected it, a teacher gave me the gift of confidence. It was in a graduate course called Instrument Design and Statistical Analysis. The professor was a Chinese man who spoke broken



English but was able to communicate his love of his subject. He had a different philosophy of assessment than most. His goal was to have every student be competent enough to get an A, rather than placing students in a predetermined grading curve. During the term we often worked in groups. We compiled our worksheets, case studies, and research paper into a portfolio. The midterm and final were open-book tests. The professor even allowed us to work together on the problems. Then, to the our surprise, after the final course grade had been turned in, he asked if anyone wanted to take a different final exam in the traditional manner — no books, no notes, no collaborating — not for the grade but as a personal challenge. I took the second final and aced it, proving to myself I had mastered the material and my fear of it.

The philosophy of children constructing knowledge through experience requires us to rethink what tests and measurements we should use to evaluate our students and schools. The type of assessment we are all perhaps most familiar with is standardized tests, which are often multiple choice. While standardized tests have their place, Indian people should not place too much emphasis on them. These tests ask students to demonstrate only a very narrow range of academic skills. They don't tell us what other talents or insights a student may have or what his or her learning needs may be. Standardized tests are designed only to tell us which students are "above average" in the narrow band of skills tested, and which are "below average." Assigning a "below average" label to a student can have a chilling effect on his or her motivation. Such an approach is at odds with traditional teaching practices that valued each child in the village, clan, or tribe.

Alternative assessment such as performance-based (sometimes called authentic) assessment reveals whether students can actually perform tasks and what their thought processes are for doing so. These alternative assessments focus on a student's knowledge and accomplishments, rather than deficits. Methods include portfolios, presentations, speeches, experiments, or essays that are an essential part of the learning experience, rather than postscripts to it. Criteria are known by and often constructed with help from the students.

These new methods of demonstrating competence are closer to traditional Indian experience than taking standardized tests. When an Indian person wove a cedar basket for cooking, it had to be tight enough to hold water and strong enough that when hot lava rocks were placed in the water to boil soup, the basket could withstand the change in temperature. The test of basket-making skills was clear for all to see. The goals and standards were known. No mystery surrounded how the basket was judged and found satisfactory or found wanting.



Looking Back to Move Ahead

The tribes who lived along the Missouri River and its tributaries grew corn and vegetables, but also conducted a summer hunt for buffalo, deer, and antelope. It was their practice to plant the crops, do one hoeing to reduce the weeds and grass around the corn hills, and then depart for the High Plains and Rocky Mountains for July and August to prepare meat for the winter. We might think there was great concern about the condition of the corn crops, since corn would provide the major food supply during the winter. But the tribes had already perceived plant relationships, and so they had what we might call "indicator plants" that told them how their corn was coming. The Pawnees simply examined the seed pods of the milkweed, and when these pods had reached a certain condition and were at maturity, they packed up everything and headed for home, arriving in time to harvest their corn and hold a corn dance. (Deloria, 1992)

In his discussion of how tribal societies had a highly sophisticated working understanding of Albert Einstein's theory of relativity, relatedness, and reality, Vine Deloria, a professor of law and political science, describes Indian methods of gathering data and constructing knowledge. The Indian principle of interpretation and observation, simply stated, is "We are all related." Deloria notes that most Indians hear this phrase thousands of times a year as they attend or participate in ceremonies. As well, "for many Indians without an ongoing ritual life the phrase seems to be simply a liturgical blessing that includes all other forms of life in human ceremonial activities."

However, the phrase "We are all related" is also significant as a practical method for investigating the natural world and drawing conclusions. Deloria recounts the previous story about the Pawnees and their corn to illustrate the way Indians observed the natural world, discovered relationships within it, and put the information to practical use.

By using observation and interpretation in the classroom of the natural world, the Pawnees were able to discern that corn and milkweed had a similar growing season, with milkweed being a bit faster growing, which allowed them the several weeks it took to return to their villages for the corn harvest after noting the milkweed's maturity. Such traditional Indian skills of observing nature, making inferences, discovering relationships, and applying knowledge of natural science to life situations were invaluable to survival in the past; they remain just as valuable in the educational settings of today.

It is well documented how Europeans arriving in the Western Hemisphere for the first time believed themselves to be more civilized and knowledgeable and superior in every way to the original inhabitants. The audacity of that presump-



tion is, in many ways, still with us today. However, the good news is that this attitude is slowly changing. Now is the time for European Americans to begin to see the lessons they can learn from Indian people regarding the learning process. Now is the time to revisit an overlooked educational philosophy and instructional practice based upon thousands of years of experience.

I have been taught that the most important trait of a warrior is the ability to extend honor and respect. Interestingly, the word "respect" comes from the Latin *respicere*, which means "the willingness to look again." As Indian people, we need to use the Title IX comprehensive planning process to honor the ancient wisdom of our traditional, precolonial educational practices. Now is the time to "look again" to our past, where I believe we will find traditional medicine for contemporary times.





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